



C20-CM-503/CAI-502

7637

BOARD DIPLOMA EXAMINATION, (C-20)

MAY/JUNE—2023

DCME - FIFTH SEMESTER EXAMINATION

SOFTWARE ENGINEERING

Time : 3 Hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Define the term high level language programming. Give two examples. 1+1+1
2. Write the job responsibilities of a software project manager. 1+1+1
3. State the three metrics for project size estimation. 1+1+1
4. List any three characteristics of a good SRS document. 1+1+1
5. Define cohesion and coupling. 1½+1½
6. List the three characteristics of a good user interface. 1+1+1
7. State the role of UML in object oriented design. 3
8. Differentiate the terms verification and validation. 1+1+1
9. Write about three designs of test cases. 1+1+1
- * 10. State the three debugging guidelines. 1+1+1

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PART—B

8×5=40

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- Instructions :** (1) Answer **all** questions.
 (2) Each question carries **eight** marks.
 (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) Compare any two software life cycle models. 4+4

(OR)

(b) Explain spiral model in detail. 8

12. (a) Explain different works of staffing level estimations. 8

(OR)

(b) Explain risk management in detail. 8

13. (a) Explain software requirement specifications (SRS) in detail. 8

(OR)

(b) Explain about organization of the SRS document. 8

14. (a) Explain the different approaches of software design. 8

(OR)

(b) Explain the steps to draw the use-case diagram. 8

15. (a) Explain about black box testing and white box testing. 4+4

(OR)

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* (b) Explain software quality management system in detail. 8

PART—C

10×1=10

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- Instructions :** (1) Answer the following question.
(2) The question carries **ten** marks.
(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

16. Design SRS document by assuming that you had a task for implementing ATM operations. The operations to be included are listed below :

- (a) Language selection
- (b) Account maintenance
 - (i) Account type
 - (ii) Withdrawal/deposit
 - (iii) Amount
 - (iv) Denominations
 - (v) Money deposition
 - (vi) Balance transfer

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